

# OPINIONS AND DECLARATIONS RENDERED BY THE INTER- NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

*Edited by*

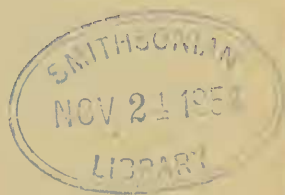
**FRANCIS HEMMING, C.M.G., C.B.E.**

Secretary to the Commission

VOLUME 8. Part 20. Pp. 273—284

## OPINION 303

Designation, under the Plenary Powers, of type species in harmony with current usage for the nominal genera *Kosmoceras*, *Perisphinctes* and *Harpoceras* (Class Cephalopoda, Order Ammonoidea) established by Waagen in 1869



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# INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

## COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN OPINION 303

### A. The Officers of the Commission

*Honorary Life President* : Dr. Karl Jordan (*British Museum (Natural History), Zoological Museum, Tring, Herts., England*).

*President* : (Vacant)

*Vice-President* : Senhor Dr. Afranio do Amaral (*Sao Paulo, Brazil*).

*Secretary* : Mr. Francis Hemming (*London, England*).

### B. The Members of the Commission

(*arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology*).

Senhor Dr. Afranio do AMARAL (*S. Paulo, Brazil*) (*Vice-President*) (1st January 1944).

Professor J. R. DYMOND (*University of Toronto, Toronto, Canada*) (1st January 1944).

Professor J. Chester BRADLEY (*Cornell University, Ithaca, N.Y., U.S.A.*) (28th March 1944).

Professor Harold E. VOKES (*Johns Hopkins University, Baltimore, Maryland, U.S.A.*) (23rd April 1944).

Dr. William Thomas CALMAN (*Coulsdon, Surrey, England*) (1st January 1947).

Professor Béla HANKÓ (*Békéscsaba, Hungary*) (1st January 1947).

Dr. Norman R. STOLL (*Rockefeller Institute for Medical Research, New York, N.Y., U.S.A.*) (1st January 1947).

Professor H. BOSCHMA (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*) (1st January 1947).

Senor Dr. Angel CABRERA (*Eva Peron, F.C.N.G.R., Argentina*) (27th July 1948)

Mr. Francis HEMMING (*London, England*) (*Secretary*) (27th July 1948).

Dr. Joseph PEARSON (*Tasmanian Museum, Hobart, Tasmania, Australia*) (27th July 1948)

Dr. Henning LEMCHE (*Universitetets Zoologiske Museum, Copenhagen, Denmark*) (27th July 1948)

Professor Tieso ESAKI (*Kyushu University, Fukuoka, Japan*) (17th April 1950).

Professor Pierre BONNET (*Université de Toulouse, France*) (9th June 1950).

Mr. Norman Denbigh RILEY (*British Museum (Natural History), London*) (9th June 1950).

Professor Tadeusz JACZEWSKI (*Department of Systematic Zoology, Warsaw University, Warsaw, Poland*) (15th June 1950)

Professor Robert MERTENS (*Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt a. M., Germany*) (5th July 1950).

Professor Erich Martin HERING (*Zoologisches Museum der Humboldt-Universität zu Berlin, Germany*) (5th July 1950).

Opinion 303. Volume 8. Part 20. Page 275.

Ruling (2) Line 9 :—

*Substitute* “Buckland, 1836” for “Waagen, 1869”.



## OPINION 303

DESIGNATION, UNDER THE PLENARY POWERS, OF  
TYPE SPECIES IN HARMONY WITH CURRENT  
USAGE FOR THE NOMINAL GENERA "KOSMO-  
CERAS", "PERISPINCTES" AND  
"HARPOCERAS" (CLASS CEPHALO-  
PODA, ORDER AMMONOIDEA)  
ESTABLISHED BY WAAGEN IN  
1869

**RULING** :—(1) Under the Plenary Powers all type selections for the under-mentioned genera made prior to the present Ruling are hereby set aside and the following nominal species are hereby designated to be their respective type species :—(a) *Ammonites spinosus* Sowerby (J. de C.), 1826, to be the type species of *Kosmoceras* Waagen, 1869 ; (b) *Ammonites variocostatus* Buckland, 1836, to be the type species of *Perisphinctes* Waagen, 1869 ; (c) *Ammonites falcifer* Sowerby (J.), 1820, to be the type species of *Harpoceras* Waagen, 1869.

(2) The under-mentioned generic names are hereby placed on the *Official List of Generic Names in Zoology* as Names Nos. 744 to 746 respectively :—(a) *Kosmoceras* Waagen, 1869 (gender : neuter) (type species, by designation, under the Plenary Powers, under (1)(a) above : *Ammonites spinosus* Sowerby (J. de C.), 1826) ; (b) *Perisphinctus* Waagen, 1869 (gender : masculine) (type species, by designation, under the Plenary Powers, under (1)(b) above : *Ammonites variocostatus* Buckland, 1836) ; (c) *Harpoceras* Waagen, 1869 (gender : neuter) type species, by designation, under the Plenary Powers, under (1) (c) above : *Ammonites falcifer* Sowerby (J.), 1820).

(3) The under-mentioned specific names are hereby placed on the *Official List of Specific Names in Zoology* as Names Nos. 164 to 166 respectively :—(a) *falcifer* Sowerby (J.), 1820, as published in the combination *Ammonites falcifier* (specific name of type species, by

designation, under the Plenary Powers, under (1) (c) above, of *Harpoceras* Waagen, 1869); (b) *spinus* Sowerby (J. de C.), 1826, as published in the combination *Ammonites spinus* (specific name of type species, by designation, under the Plenary Powers, under (a) (a) above, of *Kosmoceras* Waagen, 1869); (c) *variocostatus* Buckland, 1836, as published in the combination *Ammonites variocostatus* (specific name of type species, by designation, under the Plenary Powers, under (1) (b) above, of *Perisphinctes* Waagen, 1869).

### I.—THE STATEMENT OF THE CASE

On 21st December 1949 Dr. W. J. Arkell (*Sedgwick Museum, Cambridge University, Cambridge*) submitted an application for the use by the Commission of its Plenary Powers for the purpose of designating type species in harmony with accustomed usage for the following nominal genera established by Waagen in 1869, (a) *Kosmoceras*, (b) *Perisphinctes*, and (c) *Harpoceras* (Class Cephalopoda, Order Ammonoidea). This application, as finally settled on 8th February 1950, was as follows:—

**Proposed use of the Plenary Powers to designate the type species of Waagen's (1869) Ammonite genera "Kosmoceras", "Harpoceras" and "Perisphinctes" (Class Cephalopoda, Order Ammonoidea) (Jurassic)**

By W. J. ARKELL, M.A., D.Sc., F.R.S.

(*Sedgwick Museum, Cambridge University, Cambridge*)

1. In a long footnote Waagen (1869 : 247—248) founded six new genera of Jurassic ammonites, the names given to which have since become "household words", but the three here dealt with are without satisfactory type species.

2. *Kosmoceras* Waagen, 1869 (: 248). This name rests on the following original diagnosis alone: "The third group comprises the Ornati, which can appropriately be named *Kosmoceras* and distinguished

by its short body-chamber, which occupies hardly more than half a whorl". No species was cited by Waagen. Haug (1887) made a family KOSMOCERATIDAE, and Buckman (1926) a superfamily KOSMOCERATACEAE. Buckman (1921 : 54) considered all the Ornati named before 1869 as included species and therefore available for selection as the type species. He accordingly selected *Am. ornatus rotundus* Quenstedt, 1846, as the type species. This species is subjectively identified with *Am. spinosus* J. de C. Sowerby, 1826 (*Min. Conch.* 6 : 78) (refigured Arkell, 1939 : 184, 187, pl. xi, fig. 1), from the Oxford Clay, Lamberti Zone, Weymouth.

3. *Perisphinctes* Waagen, 1869 (: 248). This rests on a somewhat longer diagnosis to which Waagen added : "To this subgenus (of *Stephanoceras*) belong all the true Planulati of the Middle and Upper Jurassic, and besides them *Per. anceps*, *astierianus*, etc." It so happens, therefore, that the only two nominal species cited by Waagen are species which he mentioned for the reason that they do *not* fall within the well-known group for which primarily he introduced the name *Perisphinctes*. He was stretching the concept to include them. Steinmann (1890) made a family PERISPINCTIDAE, and Wedekind (1917) a superfamily PERISPINCTACEAE, while as yet no type species had been selected. Buckman (1920 : 26—27) considered all Planulates of the Middle and Upper Jurassic named before 1869 should be regarded as originally included species and therefore available for selection as the type species. He accordingly so selected *Am. biplex* J. Sowerby, 1821. The holotype of this species (refigured Arkell, 1947 : 362) is a distorted fragment of inner whorls, not identifiable specifically, from the Drift, ex Amphill Clay, Upper Oxfordian. It might belong to one of at least three species, of which the best-known and earliest named and most probable is *P. variocostatus* Buckland, 1836, and this has been taken as the standard for defining the genus and subgenus *Perisphinctes* (see Arkell, 1947 : 363, pl. lxxxvi, figs. 1—4).

4. *Harpoceras* Waagen, 1869 (: 245, 250). This genus is in the same position as *Perisphinctes*. Waagen (1869 : 245) proposed it for the Falciferi of the Lias but named no species of the true Falciferi, only (: 250) ten species for which he was stretching the definition to bring them in. None of these ten species has had a well-known generic name for less than 50 years. To consider them the sole species eligible for selection as the type species would be disastrous. Neumayr (1875) made a subfamily HARPOCERATINAE, Zittel (1884) and a family HARPOCERATIDAE, and Wedekind (1917) a superfamily HARPOCERACEA. The first selection of a type species seems to have been by Fischer (1882 : 392) who selected *A. serpentinus* Schlotheim, 1813, an unfigured and problematic species. Buckman (1919 : pls. cxxxviii, A, B, and 1926 : pl. cxxxviii, C) considered that the species should be interpreted by Reinecke's figure of 1818, which he reproduced ; at the same time he named the genus *Hildoceratoides* ; this species does not belong to

the subfamily HARPOCERATINAE Neumayr (1875) but to the family and subfamily HILDOCERATIDAE Hyatt, 1867, so that if it were accepted as the type species, HARPOCERATINAE would disappear as a synonym of HILDOCERATINAE. Buckman (1928 : pl. dcclxiv), apparently unaware of Fischer's type selection, selected *Am. falcifer* J. Sowerby 1820, (*Min. Conch.* 3 : 99), as the type species of Waagen's *Harpoceras* and refigured Sowerby's holotype, from the Upper Lias of Barrington, Somerset, a readily identifiable specimen of a species on which von Buch's "family Falciferi" was founded and of which it was always regarded as the type species by virtual tautonomy. The genus *Harpoceras* having been founded expressly for the Falciferi ought to have *A. falcifer* as its type species, notwithstanding Fischer's designation. Buckman did in fact regard this species in this light as from 1887, although he did not so select it in the strict meaning of the term.

5. In order to avoid the serious disturbance in the literature of Jurassic ammonites and the confusion both in nomenclature and systematics which would follow the strict application of the *Règles* in the case of the generic names discussed above, I ask the International Commission on Zoological Nomenclature :—

- (1) to use its Plenary Powers (a) to set aside all selections of type species for the under-mentioned genera made prior to the proposed decision and (b) to designate as their respective type species the species severally specified below :—

| Name of Genus<br>(1)                 | Gender of<br>generic name<br>(2) | Name of Species proposed to be<br>designated as the type species of<br>the genus specified in Col. 1<br>(3) |
|--------------------------------------|----------------------------------|---|
| <i>Kosmoceras</i> Waagen,<br>1869    | N                                | <i>Ammonites spinosus</i> Sowerby<br>(J. de C.), 1826   |
| <i>Perisphinctes</i> Waagen,<br>1869 | M                                | <i>Ammonites variocostatus</i><br>Buckland, 1836  |
| <i>Harpoceras</i> Waagen,<br>1869    | N                                | <i>Ammonites falcifer</i> Sowerby (J.)<br>1820  |

- (2) to place on the *Official List of Generic Names in Zoology* the three generic names specified in Col. (1) in point (1) above with the type species specified in Col. (3) in point (1) above, proposed to be so designated under the Plenary Powers :—

- (3) to place on the *Official List of Specific Trivial Names in Zoology* the under-mentioned trivial names :—

- (a) *falcifer* Sowerby, 1820, as published in the binominal combination *Ammonites falcifer*;



- (b) *spinosus* Sowerby, 1826, as published in the binominal combination *Ammonites spinosus*;
- (c) *variocostatus* Buckland, 1836, as published in the binominal combination *Ammonites variocostatus*.

### References

- ARKELL, W. J., 1939, *Quart. J. geol. Soc. Lond.* **95** : 184, 187
- , 1947, Monograph on the Ammonites of the English Corallian Beds, part 13 : 362, 363. (*Palaeont. Soc. Lond.*)
- BUCKMAN, S. S., 1887, "On *Ammonites serpentinus*, *Am. falcifer*, *Am. elegans*, etc." *Geol. Mag.* (3) **4** : 396
- FISCHER, P., 1882, *Manuel de Conchyliologie* : 392
- SCHLOTHEIM, E. F. VON, 1813, In Leonhard's *Taschenbuch für die gesamte Mineralogie* (Frankfurt)
- WAAGEN, W., 1869, "Die Formenreihe des *Ammonites subradiatus*." *Geognost. Paläont. Beiträge*, **2** (Heft 2) : 181

## II.—THE SUBSEQUENT HISTORY OF THE CASE

2. *Registration of the present application:* On receipt of Dr. Arkell's application, the question of the species to be accepted as the type species of the genera *Kosmoceras* Waagen, 1869, *Perisphinctes* Waagen, 1869, and *Harpoceras* Waagen, 1869, was allotted the Registered Number Z.N.(S.) 445.

3. *Publication of the present application:* The present application was sent to the printer in December 1950 and was published on 4th May 1951 in Triple-Part 6/8 of volume 2 of the *Bulletin of Zoological Nomenclature* (Arkell, 1951, *Bull. zool. Nomencl.* **2** : 191—193).

4. *Issue of Public Notices:* Under the revised arrangements approved by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* 4 : 51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 4th May 1951, both in Triple-Part 6/8 of volume 2 of the *Bulletin of Zoological Nomenclature*, the Part in which Dr. Arkell's application was published, and also to the other prescribed serial publications. In addition, Notice was given to certain palaeontological serial publications in Europe and America. The publication of these Notices elicited no objection to the action proposed.

5. *Support received from Dr. Helmut Hölder (Geologisch-Paläontologisches Institut der Universität Tübingen, Germany):* On 6th October 1951, Dr. Helmut Hölder (*Geologisch-Paläontologisches Institut der Universität Tübingen*) submitted a statement setting out his views on the applications relating to the names of ammonites submitted by Dr. Arkell published in Triple-Part 6/8 of volume 2 of the *Bulletin of Zoological Nomenclature*. The following is an extract from Dr. Hölder's communication indicating his support for the proposal relating to the generic name *Perisphinctes* Waagen, 1869 :—

**Stellungnahme zu Arkell's Anträgen zur Nomenklatur jurassischer Ammoniten in "Bull. zool. Nomencl." 2, 1951**

Den Anträgen Arkell's auf Suspension der Regeln sowie den vorgeschlagenen type species ist in Interesse einer Regelung der verworrenen Ammoniten-Nomenklatur und -Taxonomie im allgemeinen zuzustimmen. Besonders zu begrüßen ist der Schutz der Gattungsnamen *Arietites* und *Perisphinctes* gegenüber *Ammonites* und *Planites* sowie der Schutz von *Sphaeroceras* und *Phylloceras*.

. . . . .

6. *Support received from the Joint Committee on Zoological Nomenclature for Paleontology in America:* On 9th April 1952 there was received a large number of letters commenting on various applications previously published in the *Bulletin of Zoological Nomenclature*, from Professor G. Winston Sinclair (then of the *University of Michigan, Ann Arbor, Michigan, U.S.A.*),

Chairman of the Joint Committee on Zoological Nomenclature for Paleontology in America. Included among these was a letter reporting that the members of the Joint Committee supported the application relating to the name *Kosmoceras* Waagen, 1869, by eight votes to three and the applications relating to the names *Perisphinctes* Waagen, 1869, and *Harpoceras* Waagen, 1869, by six votes to five. The foregoing letter was dated 18th February 1952, and its late receipt was apparently due to a decision to defer the despatch to the Commission of the letters containing comments by members of the Joint Committee until all the letters in question had been prepared. By the date on which this letter was received the Prescribed Period of Public Notice had expired and the Voting Paper (V.P.(52)21) had been prepared. It was therefore impossible to include in that Voting Paper a reference to Professor Sinclair's letter, but, when the Voting Paper was despatched (24th April), a supplementary sheet containing the particulars furnished by Professor Sinclair was issued to the Members of the Commission, who were thus placed in possession of the views of the members of the Joint Committee at the same time that they received the Voting Paper relating to the present case. The following is the text of Professor Sinclair's letter :—

The Joint Committee on Zoological Nomenclature for Palaeontology in America has considered this subject, and I wish to inform you that, being polled, they voted : To support the petitions (six) :—(1) Katherine V. W. Palmer ; (2) J. Marvin Weller ; (3) Bobb Schaeffer ; (4) Bryan Patterson ; (5) John B. Reeside, Jr. ; (6) R. C. Moore. To support the petition concerning *Kosmoceras*, but to oppose the other petitions (two) :—(1) A. Myra Keen ; (2) Siemon W. Muller. To oppose all the petitions (three) :—(1) Don L. Frizzell ; (2) John W. Wells ; (3) G. Winston Sinclair.

### III.—THE DECISION OF THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

7. *Issue of Voting Paper V.P.(52)21* : On 24th April 1952, a Voting Paper (V.P.(52)21) was issued in which the Members of the Commission were invited to vote either for, or against,

the proposal "relating to the names *Kosmoceras*, *Perisphinctes* and *Harpoceras*, all of Waagen, 1869, as specified in Points (1) to (3) at the foot of page 192 and concluded on page 193 of volume 2 of the *Bulletin of Zoological Nomenclature*" [i.e. in the last paragraph of the application reproduced in the first paragraph of the present *Opinion*].

8. *The Prescribed Voting Period*: As the foregoing Voting Paper was issued under the Three-Month Rule, the prescribed Voting Period closed on 24th July 1952.

9. *Particulars of the Voting on Voting Paper V.P.(52)21*: The state of the voting on Voting Paper V.P.(52)21 at the close of the prescribed Voting Period was as follows:—

(a) *Affirmative Votes had been given by the following seventeen (17) Commissioners (arranged in the order in which Votes were received)*:

Calman ; Hering ; Dymond ; Esaki ; do Amaral ; Hankó ; Bonnet ; Lemche ; Vokes ; Cabrera ; Pearson ; Bradley ; Boschma ; Stoll (except as respects *Perisphinctes* and *Harpoceras*) ; Hemming ; Riley ; Mertens ;

(b) *A Negative Vote had been given by one (1) Commissioner in respect of two of the names dealt with in the foregoing Voting Paper* :

Stoll (as respects *Perisphinctes* and *Harpoceras*) ;

(c) *Voting Paper V.P.(52)21 was not returned by one (1) Commissioner*:

Jaczewski.

10. *Declaration of Result of Vote*: On 25th July 1952, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(52)21, signed a Certificate that the Votes cast were as set out in paragraph 9 above and declaring that the proposal submitted